

the structural gene is ligated to an appropriate restriction enzyme site located downstream of the promoter region in the correct transcriptional orientation.

5 For the host transformed by the recombinant vector described above, for example, *Escherichia genus*, *Bacillus genus*, Yeast, insect cells, insects, and animal cells are used.

Specific examples of the host *Escherichia genus*
 10 are *Escherichia coli* K12·DH1 [Proceedings of the National Academy of Sciences of the USA (Proc. Natl. Acad. Sci. USA), Vol. 60, 160 (1968)], JM103 [Nucleic Acids Research, Vol. 9, 309 (1981)], JM109, JA221 [Journal of Molecular Biology, Vol. 120, 517 (1978)],
 15 HB101 [Journal of Molecular Biology, Vol. 41, 459 (1969)], and C600 [Genetics, Vol. 39, 440 (1954)].

For the host *Bacillus genus*, for example, *Bacillus subtilis* MI114 [Gene, Vol. 24, 255 (1983)] and 207-21 [Journal of Biochemistry, Vol. 95, 87 (1984)] are used.

20 For the host yeast, for example, *Saccharomyces cerevisiae* AH22, AH22R⁻, NA87-11A, DKD-5D, 20B-12, *Schizosaccharomyces pombe* NCYC1913, NCYC2036, and *Pichia pastoris* are used.

For the host insect cells, for example, when the
 25 virus is AcNPV, *Spodoptera frugiperda* cells (Sf cells), MG1 cells derived from the middle gut of *Trichoplusia ni*, High FiveTM cells derived from *Trichoplusia ni* eggs, *Mamestra brassicae*-derived cells, and *Estigmena acrea*-derived cells are used. When the virus is BmNPV,
 30 silkworm-derived cell line *Bombyx mori* N (BmN cells) are used. For said Sf cells, for example, Sf9 cells (ATCC CRL1711), Sf21 cells (Vaughn, J.L. et al., In Vivo, 13, 213-217 (1977)) are used.

For the host insect, for example, silkworm larvae
 35 are used [Maeda et al., Nature, Vol. 315, 592 (1985)].

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For the host animal cells, for example, monkey COS-7 cells, Vero, Chinese hamster CHO cells (CHO), dhfr gene-deficient Chinese hamster cells CHO (CHO (dlfr⁻) cells), mouse L cells, mouse AtT-20, mouse
5 myeloma cells, rat GH3, mouse fibroblast 3T3-L1, human liver cancer cell HepG2 (HepG2 cells), human sarcoma cell MG-63 (MG-63 cells), human FL cells, white fat cells, egg cells, ES cells (Evans, M.J. and Kaufman, K.H. (1981), Nature, 292, 154), and differentiation-
10 induced cells under appropriate differentiation conditions are used.

Animal cells, especially white fat cells, may be used. As a process of DNA transfer to individual animals, egg cells and ES cells (Evans, M.J. and
15 Kaufman, K.H. (1981), Nature, 292, 154) are used.

For the method of transforming these cells, the calcium phosphate method (Graham et al. (1973), Virology, 52, 456), electroporation (Ishizaki et al. (1986), Cell Engineering (Saibo Kogaku), 5, 577), and
20 microinjection are used.

More specifically, for transformation of bacteria of *Escherichia* genus, for example, the methods published in Proc. Natl. Acad. USA, Vol. 69, 2110 (1972) and Gene, Vol. 17, 107 (1982) are used.

25 Bacteria of *Bacillus* genus can be transformed following, for example, the method published in Molecular & General Genetics, Vol. 168, 111 (1979).

Yeast can be transformed following, for example, the methods published in Methods in Enzymology, Vol. 30 194, 182-187 (1991) and Proc. Natl. Acad. USA, Vol. 75, 1929 (1978).

Insect cells and insects can be transformed following, for example, the method published in Bio/Technology, 6, 47-55 (1988).

35 Animal cells can be transformed by, for example,

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the methods described in Cell Engineering (Saibo Kogaku), Separate Vol. 8, New Cell Engineering Experimental Protocol, 263-267 (1995) (Shujun-sha) and Virology, Vol. 52, 456 (1973).

5 The transformant described above is cultured in the presence of the specified compound, and by measuring and comparing the gene product in the cultured material, the ability of controlling the promoter activity of the compound can be examined.

10 The transformant is cultured by publicly known methods. For the medium for culturing the transformant using *Escherichia* and *Bacillus* hosts, liquid medium is appropriate, which contains carbon source, nitrogen source, inorganic compounds, and other substances
15 necessary for the growth of the transformants. The carbon source includes, for example, glucose, dextrin, soluble starch, and sucrose, etc. The nitrogen source includes, for example, inorganic and organic compounds such as ammonium salts, nitrates, cornsteep liquor,
20 peptone, casein, meat extract, soybean cake, and potato extract, etc. The inorganic compounds include, for example, calcium chloride, sodium dihydrogen phosphate, and magnesium chloride, etc. Yeast extract, vitamins, and growth-stimulating factors may be added. The pH
25 about 5 - 8 is desirable for the culture medium.

 For the culture medium for bacteria of *Escherichia* genus, for example, M9 medium containing glucose and casamino acid (Miller, Journal of Experiments in Molecular Genetics, 431-433, Cold Spring Harbor
30 Laboratory, New York, 1972) is preferred. When a higher efficiency of the promoter is required, reagent such as 3- β -indolylacrylic acid may be added. When the host is bacteria of *Escherichia* genus, the bacteria are generally cultured at about 15 - 43°C for about 3 - 24
35 hours, and aeration or stirring may be added to the

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